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attach.  
Hawkins

PATENT

6-4-02

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Pelrine et al.

Attorney Docket No.:SRIIP028/4431-2

Application No.: 09,779,203

Examiner: P. Medley

Filed: February 7, 2001

Group: 2834

Title: MONOLITHIC ELECTROACTIVE  
POLYMERS

**CERTIFICATE OF TRANSMISSION**

I hereby certify that this correspondence is being transmitted via facsimile to the U.S. Patent and Trademark Office, Attention: Examiner P. Medley at facsimile telephone number (703) 746-4178 on May 31, 2002.

Signed: Deborah Neill  
Deborah Neill

**FAX RECEIVED**

Assistant Commissioner for Patents  
Washington, D.C. 20231

MAY 31 2002

T.C. 2800

Sir:

This reply and the enclosed remarks are submitted in response to the non-final Office Action mailed on March 14, 2002. Applicants submit that the attached remarks fully address the issues raised in the Office Action.

**IN THE CLAIMS**

Please AMEND the claims as follows:

1. (Once Amended) A transducer for converting between electrical energy and mechanical energy, the transducer comprising an electroactive polymer having a plurality of active areas, the plurality of active areas comprising:

a first active area having at least two first active area electrodes and a first portion of the electroactive polymer arranged in a manner which causes the first portion to deflect in response to a change in electric field provided by the at least two first active area electrodes and/or arranged in a manner which causes a change in electric field in response to deflection of the first portion; and

a second active area having at least two second active area electrodes and a second portion of the electroactive polymer arranged in a manner which causes the second portion to deflect in response to a change in electric field provided by the at least two second active area electrodes and/or arranged in a manner which causes a change in electric field in response to deflection of the second portion,

wherein the electroactive polymer is elastically pre-strained.

USSN 09/779,203  
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